



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,637	10/31/2003	Daryl Smothers	36400.04US7	5386

25541 7590 08/23/2005
NEAL, GERBER, & EISENBERG
SUITE 2200
2 NORTH LASALLE STREET
CHICAGO, IL 60602

EXAMINER

LOPEZ, FRANK D

ART UNIT	PAPER NUMBER
----------	--------------

3745

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Phm

Office Action Summary	Application No. 10/699,637	Applicant(s) SMOTHERS ET AL.	
	Examiner F. Daniel Lopez	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-22, 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's arguments filed June 9, 2005, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 1-4 have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection are necessitated by the added limitations that "no more than one output shaft extends from the housing" (last 2 lines of claim 1).

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 1-3 are rejected under 35 U.S.C. § 103 as being unpatentable over Wensel in view of Ohashi. Wensel discloses a hydrostatic transmission comprising input (connected to pulley 26) and output (27) shafts extending through a housing (24) and a control arm connected to lever (25) extends out the housing on a side opposite to the output shaft; wherein the axes of the input and output shafts are perpendicular to each other, and the output shaft is the only output shaft extending through the housing; but does not disclose that the details of the transmission, including a rotatable hydraulic pump and motor blocks mounted on pump and motor running surfaces, respectively; of a center section; wherein the output shaft extends through a fixed swash plate mounted in the housing and engaging a plurality of motor pistons in the motor block; wherein the center section has hydraulic porting formed therein and is mounted entirely within the housing; wherein the control arm engages a second swash plate, which is engaged to the pump; wherein the input shaft drives the pump block; and wherein the housing forms the sump.

Ohashi teaches, for a hydrostatic transmission comprising input (11) and output (12) shafts extending through a housing (1, 2) and a control arm connected to lever (30) extends out the housing; wherein the axes of the input and output shafts are perpendicular to each other; that the hydrostatic transmission includes rotatable hydraulic pump (5) and motor (6) blocks mounted on pump and motor running surfaces, respectively; of a center section (3); wherein the output shaft extends through the fixed

Art Unit: 3745

swash plate (8) mounted in the housing and engaging with a plurality of motor pistons (18) in the motor block; wherein the center section has hydraulic porting formed therein and is mounted entirely within the housing; wherein the control arm engages a second swash plate (7), which is engaged to the pump; wherein the input shaft drives the pump block; and wherein the housing forms a sump(51, 52).

Since Wensel does not show details of a hydrostatic transmission and Ohashi does; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the transmission of Wensel include rotatable hydraulic pump and motor blocks mounted on pump and motor running surfaces, respectively; of a center section; wherein the output shaft extends through a fixed swash plate mounted in the housing and engaging a plurality of motor pistons in the motor block; wherein the center section has hydraulic porting formed therein and is mounted entirely within the housing; wherein the control arm engages a second swash plate, which is engaged to the pump; wherein the input shaft drives the pump block; and wherein the housing forms the sump, as taught by Ohashi, as a matter of engineering expediency.

Claim 4 is rejected under 35 U.S.C. § 103 as being unpatentable over Wensel in view of Ohashi, as applied to claim 2 and further in view of Swanson. The modified Wensel teaches all of the element of claim 4; but does not disclose that the pump shaft extends through the center section and drives a separate charge pump mounted on an external surface of the housing.

Swanson teaches, for a hydrostatic transmission comprising a pump connected to a motor by porting in a center section (22); with an input shaft (21) and a single output shaft (52) extending through a housing (22, 23) to drive a rotatable pump block (34) and be driven by a rotatable motor block (57), respectively; wherein the center section has pump and motor running surfaces on which the pump and motor blocks, respectively, are rotatably mounted; wherein the housing forms an internal sump (connected to 98); that the pump shaft extends through the center section and drives a separate charge pump (92) mounted on an external surface of the housing, for the purpose of supplying make-up fluid to the hydrostatic transmission.

Art Unit: 3745

Since the modified Wensel and Swanson are both from the same field of endeavor, the purpose disclosed by Swanson would have been recognized in the pertinent art of the modified Wensel. It would have been obvious at the time the invention was made to one having ordinary skill in the art to extend the pump shaft through the center section of the modified Wensel, to drive a separate charge pump mounted on an external surface of the housing, as taught by Swanson, for the purpose of supplying make-up fluid to the hydrostatic transmission.

Conclusion

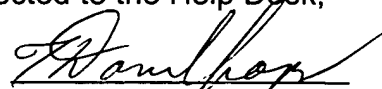
Claims 5-22, 24 and 25 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571- 272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
August 22, 2005